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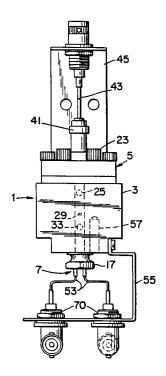
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## 54 Discharge ionization detector.

57) A discharge ionization detector which comprises with a cylindrical housing wherein is formed a discharge chamber at one end, and wherein is formed an ionization chamber at the other end an aperture connecting the chambers, arc electrodes being located in the discharge chamber, emitter/collector electrodes being located in the ionization chamber, the latter comprising flat parallel plates, the housing being provided with an inlet into the discharge chamber for delivering discharge gas to the discharge chamber which discharge gas leaves the discharge chamber through the aforementioned aperture, with an inlet into the ionization chamber for delivering sample gas to the ionization chamber, and with an outlet from the ionization chamber for carrying the mixed discharge gas and sample gas out of the ionization chamber. The discharge gas and sample gas mix then pass between the flat parallel emitter/collector plates before leaving the ionization chamber through the outlet. The ionization chamber should be less than about 500 microliters in volume.

Fig.1





## EUROPEAN SEARCH REPORT

EP 90 30 8033

DOCUMENTS CONSIDERED TO BE RELEVANT					
Category	Citation of document wi	th indication, where appropriate, vant passages	Re	elevant claim	CLASSIFICATION OF THE APPLICATION (Int. CI.5)
A,D	US-A-4 789 783 (R.D. CO * abstract; claim 1 *	OK)	1		G 01 N 27/70 G 01 N 30/64
Α	US-A-4 266 196 (K. KAWAZOE et al.) * abstract; figure 4 *		1		
Α	US-A-4 028 617 (T. KAMO et al.)  * abstract; figure 1 *		1		
Α	US-A-3 454 828 (M. YAM/ * claim 1 * — -	 ANE) 	1		
					TECHNICAL FIELDS SEARCHED (Int. CI.5)
	The present search report has	been drawn up for all claims			
Place of search Date of completion of			search I		Examiner
Berlin 05 December		05 December	er 91 BRISON O.P.		
Y: A: O: P:	CATEGORY OF CITED DOCI particularly relevant if taken alone particularly relevant if combined wit document of the same catagory technological background non-written disclosure intermediate document theory or principle underlying the in	h another	the filing d D: document L: document	ate cited in th cited for c	